# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



# Niangua Darter

Etheostoma nianguae

Common name • Niangua Darter
Scientific name • Etheostoma nianguae
Federal status • Threatened
State status • Endangered

# **Ecology**

Niangua darters are endemic only to southcentral Missouri. They inhabit clear upland creeks and small- to medium-sized rivers with slight to moderate currents. They require continuously flowing streams with silt-free gravel and rock bottoms. Niangua darters are found most of the year in shallow pools, margins, and stream runs. Prior to spawning, they move from pools and slow runs to gravel riffles. The spawning season runs from mid-March to early June, but most of the breeding occurs in April. Adults are commonly 2.6-4.4 inches in length. Niangua darters eat the nymphs of stoneflies and mayflies and other aquatic insects.

#### **Reasons for Decline**

The Niangua darter has never been abundant nor widespread in distribution. Although historically it occurred in several rivers throughout southcentral Missouri, most populations have been declining for the past several decades or have already disappeared. Declines in Niangua darter numbers are primarily due to habitat loss from reservoir and bridge construction, stream channelization, and increased sediment in streams. Current threats to Niangua darters include improper and untimely gravel and sand removal, loss of stream side vegetation, fertilizer and pesticide run-off, increased nutrification from livestock and human waste, and increased competition and predation from introduced fish species.

### Specific Recommendations

The Niangua darter is a valuable indicator species because it appears to be quite sensitive to changes in stream habitat. Local Niangua darter populations are quick to respond to stream degradation, especially increases in silt and nutrient loads. Practices that stabilize and improve Niangua darter habitat will benefit numerous other aquatic species.

- $\rightarrow$  Project activities should not occur below the high bank of the stream between March 15 and June 15.
- → Sheet piling used to construct coffer dams for bridge piers may be placed after June 15 and should be removed before the following March 15. Removal of the sheet piling should be coordinated with appropriate Missouri Department of Conservation personnel.
- → Dams and impoundment structures should not be constructed in streams where this species

#### **General Recommendations**

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

#### **Information Contacts**

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation Policy Coordination Section P.O. Box 180 2901 W. Truman Blvd Jefferson City, MO 65102-0180 Telephone: 573/751-4115

Missouri Department of Natural Resources Division of Environmental Quality P.O. Box 176 Jefferson City, MO 65102-0176 Telephone: 573/526-3315

> U.S. Army Corps of Engineers Regulatory Branch 700 Federal Building Kansas City, MO 64106-2896 Telephone: 816/983-3990

U.S. Environmental Protection Agency Water, Wetlands, and Pesticides Division 901 North 5th Street Kansas City, KS 66101 Telephone: 913/551-7307

> U.S. Fish and Wildlife Service Ecological Services Field Office 608 E. Cherry Street, Room 200 Columbia, MO 65201 Telephone: 573/876-1911

## Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.